

ABSTRACT OF THE DISCLOSURE

A write-once optical information recording medium is provided that is capable of realizing a high transfer rate and a method of recording and reproducing information on and from the optical information recording medium. The optical information recording medium is constructed by stacking a reflective layer 12, a first dielectric layer 13, a recording layer 14, a write-protect layer 15, a second dielectric layer 16 and a transparent cover layer 17 on a polycarbonate substrate 11. The recording layer 14 is made of a phase-change material, and the cover layer 17 is made of UV curing resin. The recording layer 14 is irradiated with a laser beam with a wavelength of 500 nm or less to change from a crystalline phase to an amorphous phase. The write-protect layer 15 prevents the recording layer 14 from changing back to the crystalline phase from the amorphous phase, formed by the phase change.